
From: Gray, David
Sent: Friday, September 8, 2017 5:42 AM
To: Carroll, Craig; Coleman, Sam; Edlund, Carl; Opalski, Dan; Peterson, Mary; Price, Lisa; Smith, Monica; Vargo, Steve; Hayes, Scott
Subject: Arkema Summary Report - Update

Revised to include our 114 letter to Arkema.

EPA has completed its response support to the Crosby Volunteer Fire Department and the Harris County Fire Marshal's Office for the catastrophic event at Arkema. The EPA and the TCEQ provided direct support to incident commander Michael Sims of the Crosby Volunteer Fire Department and Chief Bob Royall of the Harris County Fire Marshal's Office, who are leading a coordinated local, state, and federal effort as part of the Unified Command to control the fire at the Arkema facility in Crosby.

As a result of initial chemical fires while the facility was flooded, EPA has collected downstream surface water runoff samples at four locations outside the evacuation zone, near residential areas.

Six surface water runoff samples were collected on Friday, September 1, 2017 in the vicinity of the Arkema plant in Crosby, Texas. Surface water runoff results were less than the screening levels that would warrant further investigation. Each flood water sample was analyzed for volatile organic chemicals and semi-volatile organic chemicals likely to come from the Arkema plant. No volatile organic chemicals or semi-volatile organic chemicals were detected in the surface water runoff samples. Non-quantifiable and compounds not definitively identified are not reported. It is important to note that chemical analysis alone cannot be used as an indication of water safety. In a flood situation, there are multiple risk factors that can cause harm, industrial chemicals are only one of those risk factors. A copy of the data reports are attached.

EPA sent its aerial surveillance aircraft to test resulting smoke from the fires at Arkema EPA's plane instrumentation is capable of measuring 78 different chemicals, including peroxides.

The Airborne Spectral Photometric Environmental Collection Technology (ASPECT) aircraft found no exceedances of the Texas comparison values. ASPECT conducted a screening level assessment to evaluate the unreported or undetected releases of hazardous materials or contaminants at the Arkema plant in Crosby, Texas from August 30, 2017 through September 7, 2017. The screening level results from ASPECT were compared to the ASPECT list of Texas Commission on Environmental Quality (TCEQ) short-term Air Monitoring Comparison Values (AMCVs) and found no exceedances of the short-term AMCVs. In addition, the ASPECT was requested to monitor for peroxide which was the source material for the fire. A copy of the ASPECT report is attached.

The TCEQ has an open investigation into the Arkema incident that will include an evaluation of any impacts due to the fires at the site. Additionally, after the final notifications are received, the TCEQ will evaluate the reported emissions events to determine compliance with applicable rules, permit provisions, and notification and reporting requirements. The TCEQ and Harris County Pollution Control are coordinating post-event monitoring, sampling, and complaint response activities. EPA has ordered Arkema to provide a detailed timeline of events and to respond within 10 days to questions about the handling of organic peroxides, which are combustible if not kept refrigerated, the amount of chemical materials, and the measures taken in advance to guard against flooding and loss of electricity. The U.S. Chemical Safety Board has initiated an investigation, and law enforcement continues to limit access to the Arkema plant in Crosby. For more information regarding Arkema, please visit <https://www.tceq.texas.gov/news/statement/statement-on-arkema-investigation>.